PostScript

LETTERS

The role of tricyclic antidepressants and tramadol in palliative care

We read with interest the review article on alternative opioids to morphine in palliative care.[1] The author has mentioned in detail various factors—biomedical, genetic, and psychological—which influence the effect of opioids. Though most of the aspects are well covered, the role of depression has not been discussed, and this has a tremendous impact on the manifestation and management of pain.[2] Initial control of depression greatly facilitates pain management. Depression must be treated aggressively (for example with antidepressants and psychotherapy sessions) or pain management will remain elusive. It has also been shown that in patients who are taking opioid drugs, the bioavailability of opioids is increased with antidepressants; the tricyclic drugs are membrane stabilising, which may account for the early onset of action in patients with chronic pain.[3]

The author mentioned the advantages of transdermal administration of fentanyl. She noted that it is highly acceptable to patients and the patches can be applied by patients or relatives themselves. We would like to stress that 25% to 50% of patients above the age of 65 suffer from major pain problems. Age related changes in skin integrity, subcutaneous fat, and water content can affect patient response to transdermal products. In fact, fentanyl patches have been associated with death in opioid-naive older adults in doses as low as 50 µg/hour.[2] Also, serum fentanyl concentrations may increase by one third in patients with a body temperature of 40°C or more. It has been suggested that fentanyl should not be given to children younger than 12 years of age or to patients younger than 18 years of age who weigh less than 50 kg. Additionally, fentanyl has a long duration of action (up to 72 hours) and therefore the side effects and adverse reactions are not easily reversed.[4] In view of this, we believe that transdermal fentanyl should not be used liberally.

It was also stated by the author that tramadol is less potent than morphine and less effective for managing severe pain. However, tramadol has been used extensively and evaluated over the last 20 years. It has proved as effective as the strong opioids in acute and chronic pain settings. In particular, tramadol administration results in little respiratory depression in comparison with equianalgesic doses of opioids, such as morphine or pethidine. Tramadol has a long record of efficacy and safety, and although it should be avoided or used with caution in epileptic patients, it is now the fourth most commonly prescribed analgesic worldwide.[5] It is certainly useful in the treatment of chronic, non-malignant, and malignant pain syndromes. Another considerable advantage of tramadol is its very low abuse potential. Consequently, it is not deemed a controlled (scheduled) drug.

In view of the above, we believe that tramadol has an important role as an alternative opioid to morphine in palliative care.

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Author's reply

First, I would like to address the apparent omission of a discussion of depression. I am entirely in agreement with the respondents' comments that depression has a major role in the manifestation and management of pain. However, in this review I was considering the differential factors influencing choice of opioid, not the assessment of pain *per se*. I pointed out at the outset that cancer pain was multifactorial, and that a thorough assessment was a prerequisite to successful management, but that the review was of strong opioids, and was beginning from the point at which these were considered appropriate treatment. I did include the effect of antidepressants in enhancing bioavailability of opioids in the text and in table 5, but in the context of drug interactions.

With regard to transdermal fentanyl: the authors appear to imply that in beginning with a discussion of its advantages, I was advocating liberal use of this drug and route. I went on to describe all its disadvantages, including its interpatient variability and long duration of action causing potential problems of overdose. I was attempting to provide a balanced overview of a drug that has proved very popular with patients and health professionals while cautioning on its overuse.

On the question of tramadol, I do not dispute that it is an effective analgesic and has a broad spectrum of clinical use. However, both from personal practice and my review of literature pertinent to palliative care, I concluded that its efficacy in the management of progressive severe cancer pain is less conclusively demonstrated, and thus questioned its role in palliative care. Respiratory depression is rarely an issue in palliative care, nor opioid abuse, although I accept that low abuse potential may facilitate adequate analgesic prescribing in chronic non-malignant pain.

Watermelon poisoning

Food borne diseases are a result of ingestion of foods contaminated by either infectious or toxic agents. These diseases are sometimes inaccurately referred to as "food poisoning", and they represent one of the most widespread and overwhelming public health problems of the modern world. Infants, children, the elderly, and the immunocompromised are more commonly affected.[1] Infection of six members of a family is described here.

The head of a family (61 years), his wife (59 years), their son (38 years), daughter in law (35 years), and two male grandchildren (14 and 11 years respectively) were admitted to hospital with gastroenteritis. About four hours earlier they had consumed pieces of freshly cut watermelon. During the past seven days they had consumed home cooked food and clear water from the domestic supply. The head of the family, who had received the lion's share of the fruit, was affected the most and was in a state of shock and acute renal failure. It took three days for his urinary output and renal parameters to improve. He was treated with intravenous fluids, ciprofloxacin, metronidazole, and other conservative measures for five days. Other members of the family had an uneventful stay in the hospital and were discharged on the second day after admission. The daughter in law, who had received the smallest share of the fruit, was affected the least and had just two or three loose stools in hospital. Haematology, urinalysis, and chest radiography of all the family members were normal. Blood biochemistry of the head of the family suggested uraemia and acidosis. Stool cultures of all members of the family grew an enteroinvasive variety of *Escherichia coli,* which was non-motile with non-lactose ferments.

We asked the fruit seller about the purchase of watermelon and this revealed the fact that watermelons can be made more colourful and sweet without cutting them open. Instead a long needle, into the core, can inject sweetener and colouring agents, three to four hours before sale. The nature of the injected agents was not revealed by the fruit seller for obvious reasons. Culture from the solution that had been injected (which had been prepared and stored in an earthenware bowl), also grew multiple colonies of the enteroinvasive variety of *E coli*, which were biochemically lactose positive, non-motile, with non-lactose ferments.

Diarrhoeal diseases have been commonly attributed to a pathogen contaminated water supply, but it is now recognised that food also plays an equally important part in 70% of such illnesses. Besides the usual foods, contamination has been reported in other foods such as raw fish, shellfish, bivalve molluscs (oysters, cockles, mussels), raw shrimp, pork, mixed d'oeuvre, crabs, prawns, rock lobster, cooked squid, turkey, street foods, eggs, egg salad, cold asparagus, aquatic plants, bottle feeds (for infants), ice creams, chocolates, candies, etc. The chief contaminants are bacteria (*E coli*, shigella, salmonella, *Vibrio cholera* 01, *Campylobacter jejuni*, brucella, *Bacillus cereus*, *Staphylococcus aureus*, *Clostridium perfringens*, and *Clostridium botulinum*), helminthes (*Trichinella spiralis*, *Taenia saginata*, *Taenia solium*, clonorchis, *Fasciola opisthorchis*, *Paragonimus* spp), protozoa (*Entamoeba hystolitica*, *Giardia lamblia*, *Cryptosporidium* spp), and enteric viruses (rotavirus hepatitis A&E virus) etc.[1]